

## WHAT IS CLAIMED IS:

1. A radio frequency amplifier module, comprising:  
a module substrate;

a radio frequency power amplifier part which is arranged  
5 on said module substrate and amplifies a power of a radio  
frequency signal;

a bias control part which is arranged on said module  
substrate and controls operation of said radio frequency power  
amplifier part with a bias voltage; and

10 a bias supply line for supplying the bias voltage from  
said bias control part to said radio frequency power amplifier  
part,

wherein said bias supply line includes at least one bonding  
pad having a capacitance component to a ground and a bonding  
15 wire formed via said at least one bonding pad.

2. The radio frequency amplifier module according to  
claim 1,

wherein said radio frequency power amplifier part is  
constituted as a semiconductor integrated circuit formed on  
20 a semiconductor substrate and said bias supply line is formed  
on said semiconductor substrate.

3. The radio frequency amplifier module according to  
claim 1,

wherein said bias control part is constituted as a  
25 semiconductor integrated circuit formed on a semiconductor

substrate and said bias supply line is formed on said semiconductor substrate.

4. The radio frequency amplifier module according to claim 1,

5 wherein said radio frequency power amplifier part and said bias control part are constituted as a semiconductor integrated circuit formed on the same semiconductor substrate and said bias supply line is formed on said semiconductor substrate.

10 5. The radio frequency amplifier module according to claim 1,

wherein said bias supply line is formed on said module substrate.

15 6. The radio frequency amplifier module according to claim 1, further comprising:

a second substrate formed on said module substrate,

wherein one part of a plurality of bonding pads included in said at least one bonding pad is formed on said module substrate and the other part of said plurality of bonding pads is formed  
20 on said second substrate.

7. A radio frequency amplifier module, comprising:

a module substrate;

a radio frequency power amplifier part that is arranged on said module substrate and amplifies a power of a radio  
25 frequency signal;

a bias control part that is arranged on said module substrate and controls operation of said radio frequency power amplifier part with a bias voltage; and

a bias supply line for supplying the bias voltage from  
5 said bias control part to said radio frequency power amplifier part,

wherein said bias supply line comprises a low pass filter which brings attenuation to a radio frequency signal leaking from said radio frequency power amplifier part to said bias  
10 control part.